is stapled through its side flanges 5 to a panel 13, with the tongues 8 thereof entered into the slots 6 of two adjacent sheets or tiles 1. As seen in FIG. 3, the sheets or tiles 1 forming the border of the screen have a flanged side 5 thereof located at the edge of the screen and the corner sheet or tile 1 has its two flanged sides 5 forming the corner of the screen.

The sheets or tiles 1 are secured on the panels 13 in courses, with the flanged sides 5 thereof overlapped by a row of reflective elements 2 of the adjacent sheets or tiles 1. The edge 7 of this row of reflective elements 2 abuts the step 4 of a flanged side 5 with the tongues 8 entered into the slots 6. Thus only a very narrow gap exists between abutting sheets or tiles 1, which nevertheless can still expand and contract individually without buckling, as the tongues 8 are of less width than the slots 6.

From the foregoing, it will be appreciated that an arrangement is provided to maintain suitable attachment of the tiles while accommodating subsequent expansion and contraction thereof. This expansion is not cumulative since each tile is anchored to the support panel 13 by means of suitable fasteners passing through the two adjacent side flanges and any resultant variation in size of each tile will be taken care of by means of the floating connection offered by its tongues 8 slidably fitting within the stationary slots 6 of the next adjacent tiles.

While the preferred reflective metal employed in the construction of the Applicant's embossed reflect sheets or tiles is aluminum or an aluminum based alloy, by virtue of its economical cost and suitability for accurate forming in a die and its retention of chemically imparted luster when lightly anodized e.g. an anodized coating of the order of $4\times10^{-4}$ inches other lustrous metals or alloys can be utilized as for example tiles of stainless steel.

For indoor purposes, where the sound is relayed through a projection screen to an audience, the Applicant's embossed metal sheets or tiles may be finely perforated, thus passing the sound from loud speakers behind a screen without appreciable loss of screen reflectance.

It will be further appreciated that the light-reflective elements may be themselves oriented with reference to the plane of a screen and/or the screen itself either tilted toward an audience or be somewhat curved to enhance direction of reflected light.

Improved light reflectance from a projection screen obviates or minimizes difficulties encountered with projection, particularly in "Drive-In" open air theatres.

With present projection equipment and generally large and poor quality screens, the projection equipment is required to be operated at maximum light intensity. Under these conditions excessive heat is applied to film causing damage by fading the colors of color film or even damaging film causing breakage.

The Applicant's screens with their substantially improved reflectance coupled with their capacity to avoid loss by scattering of light outside the viewing area occupied by an audience permit running of projection equipment without overload.

Furthermore, with the Applicant's high reflectance and directional reflectance pictures may be viewed in twilight an advantageous circumstance in regions where summer daylight saving has or may be adopted.

Variations and modifications may be made without departing from the scope of the invention as defined in the appended claims.

I claim:

1. A projection screen for use primarily in an outdoor theater, said screen formed of a plurality of individual reflective metal tiles each embossed with light reflective elements of a minute size not resolvable to the eye of observers and which direct incident light toward an audience viewing said screen, a support on which said tiles are individually mounted, said tiles being movable individually on said support under the influence of expansion and contraction, said tiles also being of small edge dimensions compared to the edge dimensions of said screen.

2. A reflective metal tile according to claim 1, said tile having two adjacent sides thereof stepped downwardly from the adjacent row of reflective elements and blended into flat side flanges, said tile also having spaced slots formed through the stepped parts between said flanges and the adjacent rows of reflective elements, and said tile further having tongues formed on the remaining two sides thereof opposite said slots and of less width than the slots.

3. A reflective metal tile according to claim 1 embossed with contiguous convex light reflecting elements which reflect the light from a film projector within an angle of 50° on either side of a vertical bisector of a screen composed of such tiles and within an angle of 30° with reference to the horizontal bisector of the said screen.

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